L 40056-66

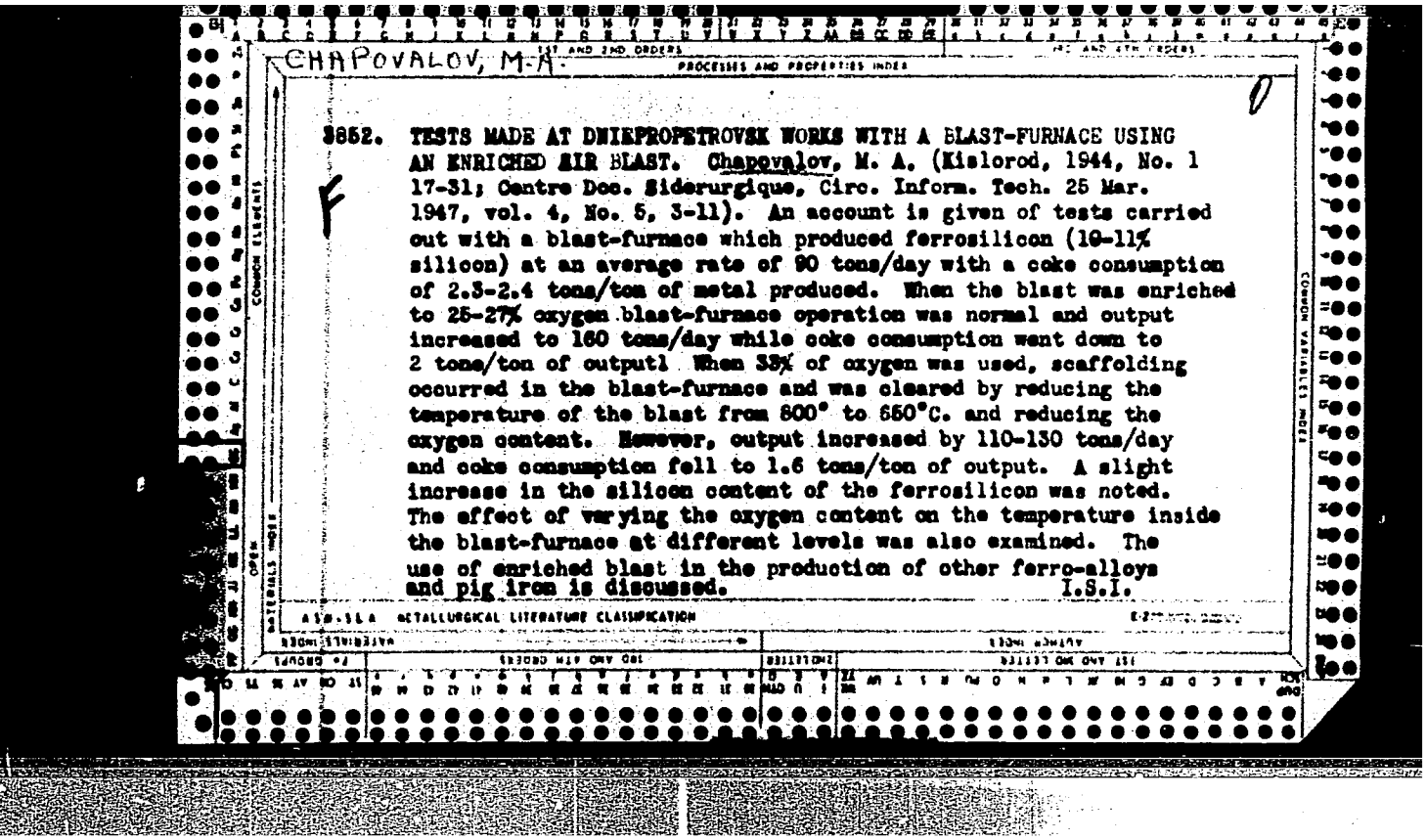
ACC NR: AP6025942

1

290 to 1070 K hardness decreased from about 2500 to 750—800 $n/m^2 \cdot 10^7$ regardless of composition. The coefficient of thermal expansion, bend strength, and contact angle in wetting with Co in vacuum showed little or no change. Orig. art. has: 7 figures and 3 tables. 21 [WW]

SUB CODE: 11/ SUBM DATE: 28Oct65/ ORIG REF: 003/ OTH REF: 002/ ATD PRESS: 5053

Card 2/2 al



CHAPOVALOV, M-A

PROCESSES AND PROPERTIES INDEX

0

3852. TESTS MADE AT DNIEPROPETROVSK WORKS WITH A BLAST-FURNACE USING AN ENRICHED AIR BLAST. Chapovalov, M. A. (Kislorod, 1944, No. 1 17-31; Centre Doc. Siderurgique, Circ. Inform. Tech. 25 Mar. 1947, vol. 4, No. 5, 3-11). An account is given of tests carried out with a blast-furnace which produced ferrosilicon (10-11% silicon) at an average rate of 90 tons/day with a coke consumption of 2.3-2.4 tons/ton of metal produced. When the blast was enriched to 25-27% oxygen blast-furnace operation was normal and output increased to 160 tons/day while coke consumption went down to 2 tons/ton of output! When 38% of oxygen was used, scaffolding occurred in the blast-furnace and was cleared by reducing the temperature of the blast from 600° to 550°C. and reducing the oxygen content. However, output increased by 110-130 tons/day and coke consumption fell to 1.6 tons/ton of output. A slight increase in the silicon content of the ferrosilicon was noted. The effect of varying the oxygen content on the temperature inside the blast-furnace at different levels was also examined. The use of enriched blast in the production of other ferro-alloys and pig iron is discussed. I.S.I.

METALLURGICAL LITERATURE CLASSIFICATION

SHAPIRO, S.Ye.; KONSTANTINOV, A.A.; ZELENSKAYA, M.I.; CHAPOVSKAYA, L.G.; STAROSTINA, I.S.

Clinical and immunobiochemical parallels in typhoid-paratyphoid patients. Report No. 1: Effect of the severity of the course, the type of pathogen and the age factor on the protein composition of the blood serum of typhoid-paratyphoid patients. Trudy Khab.med. inst. no.20:38-42 '60. (MIRA 15:10)

1. Iz kliniki infektsionnykh bolezney (zav. dotsent S.Ye.Shapiro) Khabarovskogo meditsinskogo instituta i biokhimicheskoy laboratorii (zav. dotsent A.A.Konstantinov) Khabarovskogo nauchno-issledovatel'skogo instituta epidemiologii i gigiyeny (dir. A.M.Krupnikova).
(BLOOD PROTEINS) (TYPHOID FEVER) (PARATYPHOID FEVER)

KONSTANTINOV, A.A.; SHAPIRO, S.Ye.; STAROSTINA, I.S.; CHAPOVSKAYA, L.G.; ZELENSKAYA, M.I.

Clinical and immunobiochemical parallels in typhoid-paratyphoid patients. Report No. 2: Effect of antibiotic therapy on the protein composition of the blood serum and Widal's reaction; the interrelation between Widal's reaction and the individual blood serum protein fractions. Trudy Khab.med.inst. no.20:43-48 '60. (MIRA 15:10)

1. Iz kliniki infektsionnykh bolezney (zav. dotsent S.Ye.Shapiro) Khabarovskogo meditsinskogo instituta i biokhimicheskoy laboratorii (zav. dotsent A.A.Konstantinov) Khabarovskogo nauchno-issledovatel'skogo instituta epidemiologii i gigiyeny (dir. A.M.Krupnikova).

(BLOOD PROTEINS) (ANTIBIOTICS) (TYPHOID FEVER)

SHAPIRO, S.Ye.; ZHDANOV, I.S.; BARYSHNIKOVA, A.I.; KIREYEVA, R.Ya.; CHAPOVSKAYA, L.G.; KRUPNIKOVA, A.M.; PODKOSOVA, N.I.

Analysis of an outbreak of paratyphoid B caused by infected chicken egg products. Zhur. mikrobiol. epid i immun. 31 no.6:26-31 Je '60. (MIRA 13:8)

1. Iz Khabarovskogo instituta epidemiologii i gigiyeny, Meditsinskogo instituta i Gorodskoy sanitarno-epidemiologicheskoy stantsii.
(KHABAROVSK--PARATYPHOID FEVER)
(FOOD CONTAMINATION)

SHAPIRO, S.Ye., dotsent; ZHDANOV, I.S., kand.med.nauk; CHAPOVSKAYA, L.P., mladshiy nauchnyy sotrudnik

Egg products as a source of paratyphoid B. Gig.i san. 26 no.1: 112-114 Ja '61. (MIRA 14:6)

1. Iz Khabarovskogo instituta epidemiologii i gigiyeny i kliniki infektsionnykh bolezney Khabarovskogo meditsinskogo instituta.
(PARATYPHOID FEVER) (EGGS—MICROBIOLOGY)

L 05166-67 EWT(m)/EWP(j) RM

ACC NR: AP7000734 SOURCE CODE: UR/0062/66/000/006/1083/1084

VOL'PIN, M. Ye., CHAPOVSKAYA, N. K., SHUR, V. B., Institute of Heteroorganic Compounds, Academy of Sciences USSR (Institut elementoorganicheskikh soyedineniy AN SSSR)

34
B

"Reaction of Nitrogen with Systems Based on Phosphine Complexes of Transition Metals"

Moscow, Izvestiya Akademii Nauk SSSR, Seriya Khimicheskaya, No 6, 1966, pp 1083-1084

Abstract: The reaction of nitrogen with systems produced by the reaction of a number of phosphine complexes of transition metals [$(Ph_3P)_2TiCl_4$, $(Ph_3P)_2FeCl_3$, $(Ph_3P)_2CoCl_2$, $(Ph_3P)_2NiCl_2$, $(Ph_3P)_2PdCl_2$, and $(Ph_3P)_2PtCl_2$] with organometallic compounds [C_2H_5MgBr in ether, n-C_4H_9Li in n-heptane, and (i-$C_4H_9)_3Al$ in n-heptane] was studied. Systems including triphenylphosphine complexes of Ti (IV) and Fe (III) react with molecular nitrogen at room temperature. The other systems studied, as well as systems of the triphenylphosphine complexes with $LiAlH_4$ (in ether) and $NaBH_4$ (In water and alcohol) were essentially inactive in the reaction with nitrogen. The pattern observed was the same as for chlorides and acetylacetonates: the most active are compounds of the transition metals situated in the left-hand portion of the transition period. [JPRS: 37,023]

TOPIC TAGS: organometallic compound, organic phosphorus compound, lithium aluminum hydride

SUB CODE: 07 / vmb SUBM DATE: 05Nov65 / ORIG REF: 004 / OTH REF: 006

Card 1/1 UDC: 541.46 + 546.12 + 661.718.1

USSR/Cultivated Plants. Grains. M

Abs Jour: Ref Zhur-Biol., No 5, 1958, 20258.

Author : Ye. V. Chapovskaya.
Inst : Not given.
Title : Summer Wheat Water Consumption in the Central Black-Earth Region. (Vodopotrebleniye yarovoy pshenitsy v usloviyakh TsChO.)

Orig Pub: V sb.: Orosheniye s.-kh. kul'tur v Tsentr.-chernozem. polose RSFSR. Byp. 2. M., AN SSSR, 1956, 185-194.

Abstract: Changes in the water consumption of summer wheat (Lyutenstsens 62, Narodnaya and Gordeiforme 10) were studied at the Kursk ZOMS [Zonal Testing and Melioration Station (?)] in 1950 and 1951 during a vegetating period under various crop watering conditions. An increase in soil moisture raised the transpiration rate. A greater water

Card : 1/2

USSR/Cultivated Plants. Grains. M

Abs Jour: Ref Zhur-Biol., No 5, 1958, 20258.

consumption was observed in summer wheat during the period of tube formation, the milky ripening. The computed factors for summer wheat water consumption in the middle belt of the Central Black-Earth Region were established for various drought years and at different levels of productivity and agrotechnics. The raising of fertility and applied agrotechny increases the yield, though the water consumption factor is reduced. By taking measures to accumulate and store the fall-winter and spring precipitation in years of average humidity, the natural water resources guarantee a wheat harvest in the Central Black-Earth Region of 30-35 centners per hectare. To obtain such a yield in dry years, artificial irrigation is required.

Card : 2/2

CHAPOVSKAYA, Ye.V.; DROZHZHINA, T.M.

Laboratory experiment in studying moisture losses of Vakhsh soils. Dokl.AN Tadsh.SSR 2 no.2:39-43 '59.
(MIRA 13:4)

1. Institut pochvovedeniya Akademii nauk Tadzhikskoy SSR. Predstavleno chlenom-korrespondentom AN Tadzhikskoy SSR V.A. Starikovym.
(Soil moisture) (Vakhsh Valley--Soils)

CHAPOVSKAYA, Ye.V.

Methods for determining the soil moisture in lysimeters. Dokl. AN Tadzh. SSR 6 no.5:31-35 '63. (MIRA 17:4)

1. Tadzhikskiy institut pochvovedeniya Gosudarstvennogo komiteta po khlopkovodstvu Sredney Azii. Predstavleno akademikom AN Tadzhikskoy SSR I.N.Antipovym-Karatayevym.

CHAPOVSKIY, A.Z., aspirant

Direction of further research on the modernization and automation of operating skip hoisting machines with asynchronous drive. Nauch. trudy Mosk. inst. radioelek. i gor. elektromekh. no. 49 pt. 2:178-184 '64 (MIRA 19:1)

CHAPOVSKIY, A.Z., inzh.

Automatic regulation in systems with controlled mechanical braking by conditions of invariancy. Izv.vys.ucheb.zav.; gor.zhur. 8 no.11:135-143 '65. (MIRA 19:1)

1. Moskovskiy institut radioelektroniki i gornoy elektromekhaniki. Rekomendovana kafedroy statsionarnykh mashin i ustanovok. Submitted May 30, 1965.

CHAPOVSKIY, K.F. [Chapovs'kyi, K.F.]

We increase the tempo of construction. Sil'. bud. 11 no.10:5-7 O '61. (MIRA 14:11)

1. Predsedatel' soveta Tetiyevskoy mezhkolkhoznoy stroitel'skoy organizatsii Kiyevskoy oblasti.
(Kiev Province--Construction industry)

MIGULIN, I.N.; CHAPOVSKIY, M.Z.

Temperature dependence of amplification factor and methods for stabilizing transistor amplifiers. Radiotekh. i elektron. 7 no.8:1409-1416 Ag '62. (MIRA 15:8)
(Transistor amplifiers)

MIGULIN, I.N.; CHAPOVSKIY, M.Z.

Dependence of the input admittance of transistors on temperature and collector current. Radiotekh. i elektron. 8 no.12:2066-2070 D '63. (MIRA 16:12)

CHAPOVSKIY, Mikhail Zakharovich[Chapovs'kyi, M.Z.], inzh.;
MIGULIN, I.M.[Myhulin, I.M.], kand. tekhn. nauk,
retsenzent

[Methods for stabilizing transistor amplifiers] Metody
stabilizatsii tranzystornykh pidsyliuvachiv. Kyiv,
Tekhnika, 1964. 194 p. (MIRA 17:11)

ACCESSION NR: AT4040774 S/2657/64/000/011/0024/0036

AUTHOR: Chapovskiy, M. Z.

TITLE: Calculating the instability of the amplification coefficient in transistor amplifiers

SOURCE: Poluprovodnikovy*ye pribory* i ikh primeneniye; sbornik statey, no. 11, 1964, 24-36

TOPIC TAGS: amplifier, amplifier cascade, transistor, amplifier stability, working point stabilization

ABSTRACT: Variations in source voltage and aging or replacement of transistors have a considerable effect on the amplification coefficients of multicascade transistor amplifiers. However, these factors have not been sufficiently considered in the literature due to a lack of experimental data on the aging of transistors, as well as the difficulty in accounting for the influence of these factors in calculations. The present author has tried to fill this gap by proposing a method of calculation in which simple expressions are used and which is backed up by experimental results. Fig. 1 of the Enclosure shows a generalized scheme for amplifier cascade working point stabilization by means of transistors, and a table in the original describes several other schemes which can be derived from the generalized scheme. For the generalized scheme, the variation in amplification coefficient (in decibels) with variations in the source voltage can be expressed as:

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ACCESSION NR: AT4040774

$$\delta K_{f(db)} = \frac{Cg_0}{g+g_0}\left(1+\frac{R_3R_0}{R_1R_3+R_2R_3}\right)\left(\pm\frac{\Delta g}{g}\right)$$

where C = 8.68 is a constant. Experimental verification has been accomplished on a two-cascade amplifier constructed according to Fig. 1 and having P 13 B triodes. With source voltage variations of ± 5 volts, current variations were ±0.2 ma, and variations in the amplification coefficient were ± 6 db. The computed values were ± 0.24 ma and ±6.58 db. For the influence of aging and replacement of transistors on the amplification coefficient, one of the expressions suggested is:

$$\delta K_{a(db)} = C\left[\frac{\Delta S_0}{S_0}-\frac{\Delta g}{g+g_0}+\frac{g_0}{g+g_0}\frac{\Delta I_{a_0}}{I_a}+\frac{g_0D_1}{g+g_0}\left(\frac{\Delta S_0}{S_0}-\frac{\Delta g}{g}\right)\right]$$

where S_0, g, i_k are lower values of the parameters and the collector current of the

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Card

ACCESSION NR: AT4040774

transistor, respectively. Experimental verification has been accomplished on the same two-cascade amplifier mentioned above by interchanging the first and second transistors. Experimental results: $\Delta i_k = 0.02$ ma and $\delta K_a = 0.42$ db. Calculated values: $\Delta i_k = 0.027$ ma and $\delta K_a = 0.4$ db. "The author thanks Docent I. N. Migulin for evaluating the results." Orig. art. has: 5 figures, 1 table, and 22 numbered formulas.

ASSOCIATION: None

SUBMITTED: 00 ENCL: 01

SUB CODE: EC NO REF SOV: 004 OTHER: 000

ACCESSION NR: AT4040774

ENCLOSURE: 01

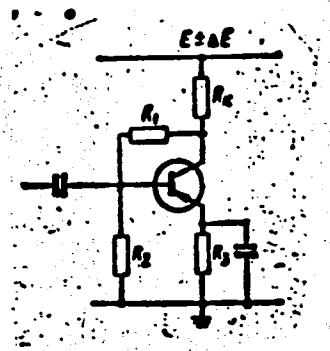

Fig. 1 - Generalized scheme of amplifier cascade working point stabilization by means of a transistor.

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Card

ACCESSION NR: AP4033116 S/0120/64/000/002/0087/0090

AUTHOR: Chapovskiy, M. Z.

TITLE: Stable transistorized amplifier

SOURCE: Pribory* i tekhnika eksperimenta, no. 2, 1964, 87-90

TOPIC TAGS: amplifier, transistorized amplifier, stable amplifier, stable transistorized amplifier, 3 stage transistorized amplifier

ABSTRACT: The results of an experimental study of 3-stage amplifiers (three versions of circuit) whose transistors are fed in series are briefly reported; the gain variation is only +0.5 db in the temperature range from +60 to -60 C; passband, 0.1-50 kc; gain, 80 db. Schematic diagrams of the amplifier for (a) higher and (b) lower frequencies are shown in Fig. 1 of Enclosure. A version of (b) in which the input transformer is eliminated is also discussed. The principal technical data of the amplifiers are reported. Orig. art. has: 3 figures and 2 tables.

Card 1/3

ACCESSION NR: AP4033116

ASSOCIATION: none

SUBMITTED: 17Apr63 ENCL: 01 SUB CODE: EC

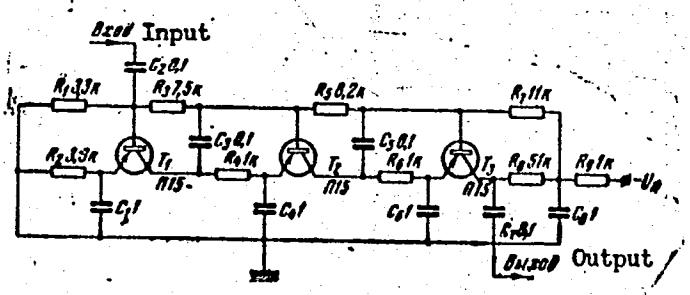
NO REF SOV: 001 OTHER: 000

Card 2/3

ACCESSION NR: AP4033116

ENCLOSURE: 01

(a)



(b)

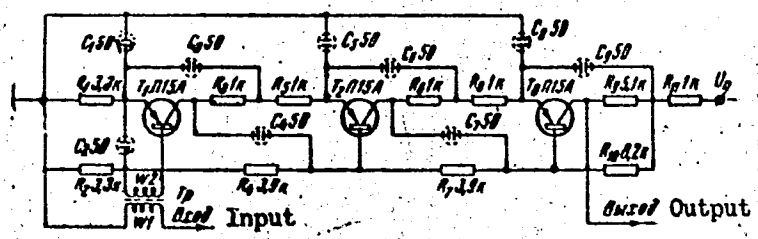


Fig. 1. Stable transistorized amplifiers

Card 3/3

L 19056-65 ASD(a)-5/AFETR/ESD(t)

ACCESSION NR: AP4041004 S/0106/64/000/006/0063/0066

AUTHOR: Migulin, I. N.; Chapovskiy, M. Z.

TITLE: Effect of electrolytic capacitors upon the temperature stability of transistorized amplifiers

SOURCE: Elektrosvyaz', no. 6, 1964, 63-66

TOPIC TAGS: amplifier, transistorized amplifier, amplifier temperature stability, capacitor, electrolytic capacitor

ABSTRACT: The instability of the gain in transistorized amplifiers due to temperature variation in the resistance of electrolytic capacitors used in emitter circuits is considered. It was experimentally found, in the well-known stabilized Shea's circuit, that the gain varies by 3 db per stage in the −60+60C temperature range. The residual feedback and the gain-temperature dependence can be considerably reduced by using decoupling filters between all signal circuits and

Card 1/2

L 19056-65 0

ACCESSION NR: AP4041004

their transistors' emitters. A two-stage decoupled transistorized amplifier circuit is supplied. Orig. art. has: 6 figures and 5 formulas.

ASSOCIATION: none

SUBMITTED: 21Apr63 ENCL: 00

SUB CODE: EC NO REF SOV: 003 OTHER: 002

Card 2/2

ACCESSION NR: AP4024733 S/0109/64/009/003/0533/0538

AUTHOR: Chapovskiy, M. Z.

TITLE: Investigating the stability of operation of direct-coupled transistorized amplifiers

SOURCE: Radiotekhnika i elektronika, v. 9, no. 3, 1964, 533-538

TOPIC TAGS: amplifier, electronic amplifier, transistorized amplifier, transistorized amplifier stability, transistorized amplifier stability investigation, feedback transistorized amplifier

ABSTRACT: A theoretical and experimental investigation of the temperature stability of a two-stage (two-transistor) direct-coupled amplifier is presented. The temperature changes cause variations in the transfer characteristics and abrupt changes in the collector reverse current. Formulas that describe the instability of collector currents in an amplifier with a common negative feedback

Card 1/2

ACCESSION NR: AP4024733

are developed. Three circuits are theoretically analyzed: (1) without the common feedback; (2) with maximum feedback; (3) with a degree of feedback. The first and third circuits were experimentally tested. It has been found that: (1) the direct-coupled circuits may have a higher stability than the separating-capacitor circuits (cf. I. N. Migulin, et al., Radiotekhnika i elektronika, 1962, 7, 8, 1409); (2) in a two-stage amplifier without a common feedback, an absolute stability of the second transistor is attainable; (3) in the maximum-feedback circuit, a mutual stabilizing effect of both transistors takes place; this circuit is more stable than the preceding one; (4) the nonmaximum-feedback circuit exhibits a high stability with fewer components. Orig. art. has: 4 figures, 32 formulas, and 1 table.

ASSOCIATION: none

SUBMITTED: 28Jan63 DATE ACQ: 10Apr64 ENCL: 00

SUB CODE: GE NO REF SOV: 003 OTHER: 002

Card 2/2

CHAPOVSKIY, Ye. G.

PA 58T98

May 1947

USSR/Soil Science
Loess

"Some Data on Origin of Loess in the Central Dnepr Area," Ye. G. Chapovskiy, P. V. Chichagov, All-Union Sci Res Inst Hydrogeol and Engin Geol, 2½ pp

"Dok Akad Nauk SSSR, Nova Ser" Vol LVI, No 6

Study of field research carried out 1940-1941 on right bank of Dnepr near towns of Zaporozh'ye and Nikopol', with particular reference to loess layer found here. Submitted by Academician B. B. Polynov, 22 Dec 1946.

58T98

[redacted]

CHAPOVSKIY, Ye. G.

ZOLOTAREV, Georgiy Sergeyevich; CHAPOVSKIY, Ye., redaktor; MEZ'YER, V.V. tekhnicheskiy redaktor

[Manual of problems on engineering geology] Sbornik zadach po inzhenernoi geologii. [Moskva] Izd-vo Mosk. univ. 1956. 178 p. (MLRA 10:4)
(Engineering geology)

CHAPOVSKIY, Ye.G.

Some results of the scientific and practical work of hydrogeological stations and future trends of their activity. Razved. i okh. nedr 22 no.9:44-51 S '56. (MIRA 9:11)

1. Vsesoyuznyy gidrogeologicheskiy trest.
(Water supply) (Water, Underground)

CHAPOVSKIY, Ye. G.

ANTONENKO, K.I.; TITOV, N.A.; CHAPOVSKIY, Ye.G.; CHURINOV, M.V.; GODOVIKOVA, L.A., redaktor izdatel'stva; GUROVA, O.A., tekhnicheskiy redaktor

[Organization and production of hydrogeological charts, scale 1:500,000] Organizatsiia i proizvodstvo gidrogeologicheskoi s"emki masshtaba 1:500,000. Sost. K.I.Antonenko i dr. Moskva, Gos.nauchno-tekhn.izd-vo lit-ry po geol. i okhrane nedr, 1957. 111 p. (MLRA 10:7)

1. Moscow. Vsesoyuznyy nauchno-issledovatel'skiy institut gidrogeologii i inzhenernoy geologii
(Geological surveys)

CHAPOVSKIY, Ye.G.

ANTONENKO, K.I.; TITOV, N.A.; CHAPOVSKIY, Ye.G.; CHURINOV, M.V.; GODOVIKOVA, L.A., redaktor izdatel'stva; GUROVA, O.A., tekhnicheskiy redaktor.

[Organization and production of hydrogeological charts on the scale of 1:200,000-1:100,000] Organizatsiia i proizvodstvo gidrogeologicheskoi s''emki masshtabov 1:200,000-1:100,000. Sost. K.I.Antonenko i dr. Moskva, Gos.nauchno-tekhn.izd-vo lit-ry po geol.i okhrane nedr, 1957. 119 p. Map (fold.) 1. (MIRA 10:11)

1. Moscow. Vsesoiuznyy nauchno-issledovatel'skiy institut gidrogeologii i inzhenernoy geologii.
(Geological surveys) (Water, Underground)

CHAPOVSKIY, Ye. G.

99-5-2/11

AUTHOR: Chapovskiy, Ye.G., Chief Geologist of the All-Union Hydro-Geological Trust.

TITLE: Several Findings of Hydro-Geological Tests Conducted in Arid and Semi-Arid Districts in Connection with the Irrigation of Pastures. (Nekotoryye rezul'taty geologicheskikh issledovaniy v pustynnykh i polupustynnykh rayonakh v svyazi s obvodneniyem pastbishch.)

PERIODICAL: "Gidrotekhnika i Melioratsiya", 1957, Nr 5, pp 8-12 (USSR)

ABSTRACT: The extensive arid and semi-arid areas of Central Asia and Kazakhstan (with the deserts of Muyun-Kumy, Kysyl-Kumy, Bet-Pak-Dala) or the black soil territories of the south-eastern parts of the USSR have good pastures, but do not have any surface water. Research conducted lately by the Ministry of Geology and Conservation of Deposits (Ministerstvo geologii i okhrany nedr) not only disapproved the former view of uselessness of these areas, but showed the feasibility to utilize them as cattle ranches. Surveying was started in 1949, and up to the present time an area of more than 1 million square kilometers has been mapped by applying modern methods of hydro-geological

Card 1/3

Several Findings of Hydro-Geological Tests Conducted in Arid and Semi-Arid Districts in Connection with the Irrigation of Pastures.

research, which disclosed large reservoirs of underground water. Of great hydro-geological interest are synclines, which are connected with basins of artesian water. In the Kyzyl-Kumy area, 16 artesian basins have been mapped, the water of which is suitable for human consumption. Considerable parts of grass lands of the Uzbek SSR have underground water close to the surface, as well as lenses of artesian water on Tertiary layers. During the 6th five-year plan more detailed exploration work will be conducted in areas where artesian water may be expected, especially in the eastern parts of Kyzyl-Kumy and the Ust'-Yurt plateau. Hydro-geological studies in the northern areas of the Aral lake ("Aktyubinskaya Oblast") have located considerable underground resources of water, sufficient for the reclamation of cattle ranges and irrigation of farm lands. The largest artesian reservoirs of this area are found on layers of the Tertiary and cretaceous periods. Also of interest in scientific and practical respects are the hydro-geological explorations, recently conducted along the river Syr-Dar'ya and the ancient, dried-out river beds Zhana-Dar'ya and Kuvan-Dar'ya being the only locations where useful water is

Several Findings of Hydro-Geological Tests Conducted in Arid and Semi-Arid Districts in Connection with the Irrigation of Pastures.

found on the territory of the Kazakh SSR. Several artesian basins were found by drilling operations in the area of the Aral sea, whereby detailed research of the Sary-Bylak artesian basin showed exploitable underground water reserves of more than 20,000 cu m/24 hrs. In the Uzboya rayon, (western Turkmen SSR) water lenses were found to be of such dimensions as to be able to supply the needs for cattle raising as well as industrial plants. The northern territory of the Caucasus has been hydro-geologically explored, whereby it was established that "floating lenses" on the surface of salt water are frequently found. As a result of research, several hundred sites were marked for the drilling of wells. The exploration of artesian water resources in the black soil territories will fundamentally improve valuable pastures. However, the forming of artesian lenses has not yet been sufficiently studied in the black soil territory, and their future capacities are still unknown.

ASSOCIATION: All-Union Hydrogeological Trust (Vsesoyuznyy gidrogeologicheskiy trest)

AVAILABLE: Library of Congress

Card 3/3

CHAPOVSKIY, Yevgeniy Grigor'yevich; MAKSIMOV, S.N., kand.geol.-miner.nauk, red.; ENTIN, M.L., red.izd-va; PITERTSEVA, N.I., tekhn.red.

[Laboratory work in soil science and soil mechanics; practical manual] Laboratornye raboty po gruntovedeniiu i mekhanike gruntov; prakticheskoe rukovodstvo. Izd.2., perer. i dop. Moskva, Gos. nauchno-tekhn.izd-vo lit-ry po geol. i okhrane nedr, 1958. 271 p. (Soil physics) (MIRA 12:4)

DUBROVKIN, V.L.; CHAPOVSKIY, Ye.G.

Method for making maps for purposes of engineering geology. Izv.vys.ucheb.zav.; geol.i razv. 2 no.10:86-94 O '59. (MIRA 13:6)

1. Vsesoyuznyy institut gidrogeologii i inzhenernoy geologii. (Geology—Maps)

AL'TOVSKIY, Mikhail Yevgen'yevich; BRODSKIY, A.A., Prinimali uchastiye: DOBRYNIN, P.A.; SLAVYANOVA, L.V., CHURINOV, M.V., CHAPOVSKIY, Ye.G., red.; SOLOV'YEVA, kartograf, red.kart; DOLGONOS, L.G., tekhn.red.kart; GRISHINA, T.B., red.izd-va; BYKOVA, V.V., tekhn. red.

[Methodological directions for the compilation of hydrogeological maps at the scales of 1:1,000,000 - 1:500,000 and 1:200,000 - 1:1,100,000] Metodicheskie ukazaniia po sostavleniiu gidrogeologicheskikh kart, masshtabov 1:1,000,000 - 1:500,000 i 1:200,000 - 1,100,000. Moskva, Gos.nauchno-tekhn.izd-vo lit-ry po geol. i okhrane nedr, 1960. 49 p., maps. (MIRA 13:6)

1. Moscow. Vsesoyuznyy nauchno-issledovatel'skiy institut gidrogeologii i inzhenernoy geologii.
(Water, Underground--Maps)

CHAPOVSKIY, Ye.G.

Surveying for land drainage purposes from the point of view of engineering geology. Razved. i okh. nedr 26 no. 1:43-48 Ja '60. (MIRA 13:12)

1. Vsesoyuznyy gidrogeologicheskiy trest.
(Geological surveys) (Drainage)

KLIMENTOV, Petr Platonovich; LANGE, O.K., zasluzhennyy deyatel' nauki, prof., retsenzent; CHAPOVSKIY, Ye.G., nauchnyy red.; SKVORTSOV, V.P., red. izd-va; IVANOVA, A.G., tekhn. red.

[Methodology of hydrogeological investigations] Metodika gidrogeologicheskikh issledovanii. Moskva, Gos. nauchno-tekhn. izd-vo lit-ry po geol. i okhrane nedr, 1961. 389 p. (MIRA 14:6)
(Water, Underground)

ZOLOTAREV, G.S., red.; SOKOLOV, D.S., red.; CHAPOVSKIY, Ye.G., red.; BINDEMAN, N.N., red.; LYKOSHIN, A.G., red.; TITOV, N.A., red.; GARMONOV, I.V., retsenzent; PRIKLONSKIY, V.A., retsenzent; POPOV, I.V., retsenzent; RODIONOV, N.V., retsenzent; KHAKIMOV, V.Z., red.; YERMAKOV, M.S., tekhn.red.

[Methods and results in the study of hydrogeological and engineering geological conditions of large reservoirs] Opyt i metodika izucheniia gidrogeologicheskikh i inzhenerno-geologicheskikh uslovii krupnykh vodokhranilishch. Pod red. G.S. Zolotareva, D.S.Sokolova i E.G.Chapovskogo. Moskva, Izd-vo Mosk. univ. Pt.1. 1959. 175 p. diagrs, maps.

(MIRA 14:4)

(Volga Valley--Reservoirs) (Engineering geology)

SEREBRYAKOV, L.P.; VOLODCHENKO, K.G.; MINASHKIN, M.A.Prinimali uchastiye: TITOV, N.A.; PROSELKOV, N.L.; MINAYEV, I.Z.; NIKOLAYEV, S.V.; SAMOYLOVA, V.F.; SIDOROVA, L.P.; FOMIN, V.F., red. vypuska; BOBRYSHEV, A.T., red. vypuska; CHAPOVSKIY, Ye.G., red. vypuska; POSPELOVA, A.M., red. izd-va; GUROVA, O.A., tekhn. red.

[Collection of unified district estimates for geological prospecting] Sbornik edinykh poraionnykh edinichnykh rastsenok na geologorazvedochnye raboty. Moskva, Gos. nauchno-tekhn. izd-vo lit-ry po geol. i okhrane nedr. No.2. [Hydrogeology and geological engineering] Gidrogeologicheskie i inzhenerno-geologicheskie raboty. 1960. 91 p. (MIRA 14:12)

1. Russia (1923- U.S.S.R.) Ministerstvo geologii i okhrany nedr. 2. Ministerstvo geologii i okhrany nedr SSSR (for Titov, Nikolayev).

(Prospecting)

POPOV, Ivan Vasil'yevich; CHAPOVSKIY, Ye.G., red.; YERMAKOV, M.S., tekhn. red.

[Engineering geology of the U.S.S.R.] Inzhenernaia geologiia SSSR. Moskva, Izd-vo Mosk. univ. Pt.1. [Fundamentals of areal engineering geology] Obshchie osnovy regional'noi inzhenernoi geologii. 1961. 177 p. (MIRA 14:11)

(Engineering geology)

MAKKAVEYEV, A.A., doktor geol.-mineral. nauk ; LANGE, O.K., prof., doktor geol.-mineral. nauk, red.; MARINOV, N.A., doktor geol.-mineral.nauk, red.; OVCHINNIKOV, A.M., red.; SOKOLOV, D.S., red.; TOLSTIKHIN, N.I., BINDEMAN, N.N., kand.geol.-mineral.nauk, red.; BRODSKIY, A.A., kand. geol.-mineral.nauk, red.; YEMEL'YANOVA, Ye.P., red.; CHAPOVSKIY, Ye.G., dots., red.; BERMAN, Yu.K., vedushchiy red.; MUKHINA, E.A., tekhn. red.

[Dictionary of hydrogeology and engineering geology] Slovar' po gidrogeologii i inzhenernoi geologii. Moskva, Gos.nauchno-tekhn.izd-vo neft. i gorno-toplivnoi lit-ry, 1961. 186 p. (MIRA 14:6)

1. Moscow. Vsesoyuznyy nauchno-issledovatel'skiy institut gidrogeologii i inzhenernoy geologii.
(Engineering geology—Dictionaries)

RYABCHENKOV, A.S.; ANTONENKO, K.I.; TITOV, N.A.; CHAPOVSKIY, Ye.G.; CHURINOV, M.V.; KONOPLYANTSEV, A.Z.; VIKTOROV, S.V.; VOSTOKOVA, Ye.A.; SADOVSKIY, N.D.; KUDELIN, B.I.; OGIL'VI, N.A.; LUNGERSGAUZEN, G.F.; BRODSKIY, [illegible].A.; SHCHERBAKOV, A.V.; POPOV, V.N.; YEMEL'YANOVA, [illegible].P.; SOKOLOV, S.S.; BERSENEV, I.I.; GROSHIN, S.I.; MAKKAVEYEV, A.A.; MARINOV, N.A.; YEFIMOV, A.I.; ASSOVSKIY, G.N.; VLADIMIROV, A.G.[deceased]; PROKHOROV, S.P.; FILIPPOVA, B.S., red. izd-va; BYKOVA, V.V., tekhn. red.

[Methodological manual on hydrogeological surveying at the scales of 1:1,000,000 - 1:500,000 and 1:200,000 - 1:100,000]Metodicheskoe rukovodstvo po gidrogeologicheskoi s"emke masshtabov 1:1000 000 - L;5000 000 i 1:200 000 - 1:100000. Pod obshchei red. A.A.Makkaveeva i A.S.Riabchenkova. Moskva, Gos. nauchno-tekhn. izd-vo lit-ry po geol. i okhrane nedr, 1961. 318 p. (MIRA 15:3)

1. Russia (1923- U.S.S.R.) Ministerstvo geologii i okhrany nedr. (Water, Underground) (Geological surveys)

ZOLOTAREV, G.S., red.; SOKOLOV, D.S., red.; CHAPOVSKIY, Ye.G., red.; GARMANOV, I.V., retsenzent; PRIKLONSKIY, V.A., retsenzent [deceased]; POPOV, I.V., retsenzent; RODIONOV, N.V., retsenzent; TITOV, N.A., nauchnyy red.; FILIPPOVA, B.S., red.; BINDEMAN, N.N., red.; LYKOSHIN, A.G., red.; YERMAKOV, M.S., tekhn. red.

[Results achieved and methods used in studying hydrogeological and engineering geological conditions of large reservoirs] Opyt i metodika izucheniia gidrogeologicheskikh i inzhenerno-geologicheskikh uslovii krupnykh vodokhranilishch. Pod red. G.S.Zolotareva, D.S. Sokolova i E.G.Chapovskogo. Moskva, Izd-vo Mosk. univ. Pts.2 and 3. 1961. 360 p. diagrs, maps. (MIRA 14:8)
(Reservoirs) (Engineering geology)

KOLOMENSKIY, N.V.; CHAPOVSKIY, Ye.G.

Main problems of engineering geology. Razved. i okh. nedr 27 no.12:42-46 D '61. (MIRA 15:3)

1. Moskovskiy geologorazvedochnyy institut (for Kolomenskiy).
2. Vsesoyuznyy gidrogeologicheskiy trest (for Chapovskiy).
(Engineering geology)

AL'TOVSKIY, M.Ye.; CHAPOVSKIY, Ye.G.; BABUSHKIN, V.D.; BINDEMAN, N.N.; LAPTEV, F.F.[deceased]; SOKOLOV, I.Yu.; CHALISHCHEV, A.M.[deceased]; PROKHOROV, S.P.; TOKAREV, A.N.; KOROTEYEV, A.P.; ABRAMOV, S.K.; KONOPLYANTSEV, A.A., red.; PRIKLONSKIY, V.A., red.[deceased]; SPITSYN, N.I., red.; MARINOV, N.A., red.; KULICHIKHIN, N.I., red.; GARMONOV, I.V., red.; LYUBCHENKO, Ye.K., red. izd-va; POTAPOV, V.S., red. izd-va; GUROVA, O.A., tekhn. red.

[Hydrogeologist's handbook] Spravochnik gidrogeologa. Pod obshchei red. M.E.Al'tovskogo. Moskva, osteoltekhizdat, 1962. 615 p. (MIRA 15:7)

(Water, Underground)

USSR

SEDENKO, Matvey Vasil'yevich; TOLSTIKHIN, N.I., retsenzent; KLIMENTOV,P.P., retsenzent; ZHELTOV,P.I., retsenzent[deceased]; CHAPOVSKIY,Ye.G., red.; FEDOTOVA, A.I., red.izd-va; GUROVA, O.A., tekhn. red.

[Hydrogeology and engineering geology]Gidrogeologiia i inzhenernaia geologiia. Moskva, Gosgeoltekhizdat, 1962. 356 p. (MIRA 16:2)

(Water, Underground) (Engineering geology)

CHAPOVSKIY, Ye.G.

Basic problems of engineering geology relative to land drainage. Razved. i okh. nedr. 30 no.11:49-52 N '64. (MIRA 18:4)

1. Gosudarstvennyy geologicheskiy komitet SSSR.

FOFOV, Ivan Vasil'yevich; CHAPOVSKIY, Ye.G., red.

[Engineering geology of the U.S.S.R.] Inzhenernaia geologiia SSSR. Moskva, Izd-vo Mosk. univ., 1965. 476 p. (MIRA 18:11)

ZAKHARKIN, L.I.; STANKO, V.I.; CHAPOVSKIY, Yu.A.

Metallation of $B_{10}C_2H_{12}$ (borine) and its derivatives with sodium amide. Izv. AN SSSR. Ser.khim. no.3:582 Mr '64. (MIRA 17:4)

1. Institut elementoorganicheskikh soyedineniy AN SSSR.

ZAKHARKIN, L.I.; STANKO, V.I.; BRATTSEV,V.A.; CHAPOVSKIY, Yu.A.; KLIMOVA, A.I.; OKHLOBYSTIN, O. Yu.; PONOMARENKO, A.A. [deceased]

Synthesis and study of the properties of a new class of organoboron compounds: $B_{10}C_2H_{12}$ ("baren") and its derivatives. Dokl. AN SSSR 155 no. 5:1119-1122 Ap '64. (MIRA 17:5)

1. Institut elementoorganicheskikh soyedineniy AN SSSR. Predstavleno akademikom A.N.Nesmeyanovym.

ZAKHARKIN, L.I.; STANKO, V.I.; CHAPOVSKIY, Yu.A.

Interaction of acetals and ortho-esters with decaborane and diacetonitriledecaborane. Izv.AN SSSR.Otd.khim.nauk no.6: 1118-1119 '62. (MIRA 15:8)

1. Institut elementoorganicheskikh soyedineniy AN SSSR.
(Acetals) (Esters) (Decaborane)

ZAKHARIKIN, L.I.; STANKO, V.I.; BRATTSEV, V.A.; CHAPOVSKIY, Yu.A.; STRUCHKOV, Yu.T.

Structure of $B_{10}C_2H_{12}$ ("baren") and its derivatives. Izv. AN SSSR. Ser. khim. no.11:2069 N '63. (MIRA 17:1)

1. Institut elementoorganicheskikh soyedineniy AN SSSR.

L 16184-65 EWT(m)/EPF(c)/EPR/EWP(j)/T/EWA(h) Pc-4/Pr-4/Ps-4/Peb RPI
ACCESSION NR: AP4045839 WW/JW/RM S/0062/63/000/012/2236/2237

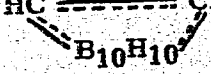
AUTHOR: Zakharkin, L. I.; Stanko, V. I.; Klimova, A. I.; Chapovskiy, Yu. A.

TITLE: The metallization of $B_{10}C_2H_{12}$ (Baren) and its derivatives with butyl lithium

SOURCE: AN SSSR. Izv. Seriya khimicheskaya, no. 12, 1963, 2236-2237

TOPIC TAGS: baren, baren ring, lithium derivative, monosubstitution, disubstitution, Bsub10Csub2Hsub12, baren carboxylic acid, electron acceptor

ABSTRACT: In continuation of earlier papers on the synthesis of a new class of organo-boron compounds called barens of the following structural formula,



this report concerns lithium substitution for the hydrogen at C, resulting in mono- and disubstituted Li derivatives of baren, and monosubstitutions of Li in monoalkyl or monoaryl barens. These were transformed into the corresponding baren

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L 16184-65
ACCESSION NR: AP4045839

corboxylic acids under the influence of H_2CO_3 and HCl. The compounds are described, reasons for the electron-acceptor properties of the baren ring given. Orig. art. has: 3 formulas

ASSOCIATION: Institut elementoorganicheskiky soedinenly Akademii nauk SSSR (Institute of Organo-elemental Compounds of the Acad. of Sciences, SSSR)

SUBMITTED: 28Sep63 ENCL: 00

SUB CODE: GC, OC NO REF SOV: 002 OTHER: 000

Card 2/2

L 15694-65 EPA(s)-2/EWT(m)/EPF(c)/EPR/EWP(j)/T Pc-4/Pr-4/Pe-4/Pt-10
ASD-3/AFFTC/ESD-3/RPL/SSD(a)/AFTC(p) WW/RM

ACCESSION NR: AP4045840 S/0062/64/000/012/2238/2239

AUTHOR: Zakharkin, L. I.; Stanko, V. I.; Brattsev, V. A.; Chapovskiy, Yu. A. Okhloby*stin, O. Yu.

TITLE: Synthesis of a new class of organo-boron compounds, $B_{10}C_2H_2$ (baren) and its derivatives

SOURCE: AN SSSR. Izv. Seriya khimicheskaya, no. 12, 1963, 2238-2239

TOPIC TAGS: organo boron compound, baren, baren derivative, decaborane, acetylenic compound, ligand, baren stability

ABSTRACT: Interaction of decaborane with acetylenic compounds in the presence of substances capable of $B_{10}H_{12}L_2$ (L=ligand) complex formation furnished a new class of compounds of the formula $B_{10}C_2H_{10}RR_1$. As ligands CH_3CN, $(C_2H_5)_2As$, $(C_2H_5)_2S$ and $HCON(CH_3)_2$ were used. The reaction proceeds in 2 stages, according to (1) and (2)

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L 15694-65

ACCESSION NR: AP4045840

3

$$B_{10}H_{14} + 2L \rightarrow B_{10}H_{12}L_2 + H_2 \quad (1)$$
$$B_{10}H_{12}L_2 + R-C\equiv-R_1 \rightarrow B_{10}C_2H_{10}RR_1 + 2L + H_2 \quad (2)$$

A yield of up to 80-85% of barens was obtained depending upon the nature of the acetylenic compound. The American patent 3,028,432 (1962) on the reaction of isopropenylacetylene with diacetonitrildecaborane was obtained. Baren and its derivatives show high stability upon exposure to heat, air, heating with strong mineral acids and good stability to alkalis and oxidants, as compared to decaborane. Orig. art. has: 3 formulas

ASSOCIATION: Institut elementoorganicheskikh soedinenly Akademii nauk SSSR (Institute of Organo-Elemental Compounds of the Academy of Sciences, SSSR)

SUBMITTED: 28Sep63 ENCL: 00

SUB CODE: CC, OC NO REF SOV: 001 OTHER: 002

Card 2/2

ACCESSION NR: AP4025016 S/0062/64/000/003/0582/0582

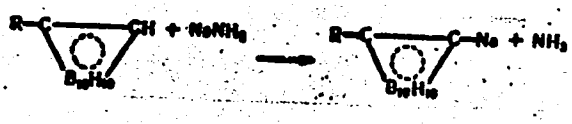
AUTHOR: Zakharkin, L. I.; Stanko, V. I.; Chapovskiy, Yu. A.

TITLE: Metallizing of B sub 10 C sub 2 H sub 12 (baren) and its derivatives with sodamide

SOURCE: AN SSSR. Izv. Seriya khimicheskaya, no. 3, 1964, 582

TOPIC TAGS: metallizing, butyllithium, sodamide, baren, baren aryl derivatives, baren alkyl derivatives, baren ring, baren ring stability, sodium amide, metal spraying

ABSTRACT: Like butyllithium, sodamide will easily metallize baren as well as its aryl and alkyl derivatives at the nucleus of the carbon atom;



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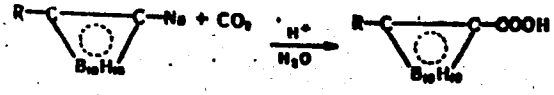
ACCESSION NR: AP4025016

a quantitative yield of the sodium derivative will be obtained upon using an excess of sodamide. Further carboxylation will yield the corresponding acids.



Sodamide treatment will result in the formation of monobarenylsodium only, which is in contrast to treatment with butyllithium. Such metallization indicates the ease with which the proton is detached from the carbon atom of the baren ring, due apparently to the great stability of the barenyl anion. Orig. art. has: 4 formulas.

ASSOCIATION: AN, SSSR

SUBMITTED: 28Nov63 DATE ACQ: 17Apr64 ENCL: 00

SUB CODE: GC NO REF SOV: 001 OTHER: 000

Card 2/2

ZAKHARKIN, L. I.; CHAPOVSKIY, Yu. A.

Cleavage of C-C bonds in the derivatives of "barencarboxylic acids."
Izv AN SSSR Ser Khim no. 4:772 Ap '64. (MIRA 17:5)

1. Institut elementoorganicheskikh soyedineniy AN SSSR.

ZAKHARKIN, L.I.; STANKO, V.I.; CHAPOVSKIY, Yu.A.

Anomalous reaction of phenylpropiolic acid chloride with diacetonitrile decaborane. Izv. AN.SSSR.Ser.khim. no. 5:944 My '64. (MIRA 17:6)

1. Institut elementoorganicheskikh soyedineniy AN SSSR.

ACCESSION NR: AP4034541 S/0020/64/155/005/1119/1122

AUTHOR: Zakharkin, L. I.; Stanko, V. I.; Brattsev, V. A.; Chapovskiy, Yu. A.; Klimova, A. I.; Okhloby*stin, O. Yu.; Ponomarenko, A. A. (Deceased)

TITLE: Synthesis and investigation of properties of a new class of organoboron compounds: B sub 10 C sub 2 H sub 12 (barene) and its derivatives.

SOURCE: AN SSSR. Doklady*, v. 155, no. 5, 1964, 1119-1122

TOPIC TAGS: barene, synthesis, organoboron compound, decaborane acetylenic compound reaction, B sub 10 C sub 2 H sub 12, barene derivative, sigma bond formation, hydrolysis stability, thermal stability, acid solvent stability, barene hydrocarbon, barene acetate, dihydroxymethylbarene, haloalkylbarene, dihalodialkylbarene, barene ester, barene ketone, barene ether, halogenation, methanolation, oxidation, Grignard reaction, cyclization

ABSTRACT: The reaction of decaborane with different acetylenic compounds was studied in detail. It was found that in the presence of materials which form complexes of the type $B_{10}H_{12}L_2$ (L = ligand) with decaborane, a new class of compounds is formed: $B_{10}C_2H_{10}RR'$, barenes.

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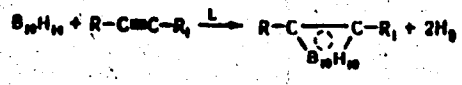
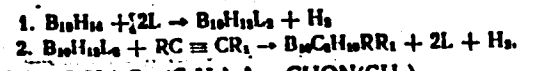
ACCESSION NR: AP4034541



The reaction is two stage:



where L — CH_3CN, $(C_2H_5)_2S$, $(C_2H_5)_3As$, $CHON(CH_3)_2$.

The hydrogen is given off between the B_5 and B_{10} and the B_7 and B_8 in the complex, so the 12 atom system has no hydrogen bridges. X-ray, IR and chemical analyses show that two σ-bonds are formed on reaction with acetylenic compounds. The barenes are stable to hydrolysis, high temperatures and mineral acids. A number of barene compounds were synthesized and characterized: barene hydrocarbons, acetates of alcohols of the barene series, dihydroxymethylbarene, haloalkyl- and dihalodialkylbarenes, complex esters of barene acids and diacids, ketones and simple ethers. Some of the reactions involved are discussed: the reaction of alkyl or aryl-barenes with butyllithium with subsequent carbonation to form barene acids; substitution of the boron or carbon hydrogens with halogens; methanolation

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ACCESSION NR: AP4034541

of the acetates to form alcohols; oxidation of the alcohols to acids with CrO_3/H_2SO_4; oxidation of hydroxymethylbarene with $KMnO_4$ to form barene; Grignard reaction; cyclization during reaction of a complex decaborane with the chloranhydride of phenylpropiolic acid to form a barene derivative. Orig. art. has: 1 table and 12 equations.

ASSOCIATION: Institut elementoorganicheskikh soyedineniy Akademii nauk SSSR (Institute of Organometallic Compounds, Academy of Sciences, SSSR)

SUBMITTED: 080ct63 ENCL: 00

SUB CODE: OC NO REF SOV: 001 OTHER: 003

Card 2/2

L 16439-65 EWT(m)/EPF(c)/EPR/EWP(j) Pc-4/Pr-4/Pe-4 RPL/SSD/SSD(a)/BSD/AFWL/ ASD(a)-5/AFMD(t)/AFTC(p) WW/RM

ACCESSION NR: AP4043838 S/0020/64/157/005/1149/1152

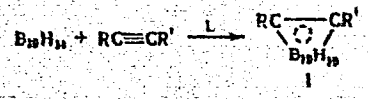
AUTHOR: Zakharkin, L. I.; Stanko, V. I.; Brattsev, V. A.; Chapovskiy, Yu. A.

TITLE: Some specific features of structure and reactivity of barene compounds

SOURCE: AN SSSR: Doklady*, v. 157, no. 5, 1964, 1149-1152

TOPIC TAGS: decaborane, decaborane reaction, barene compound, decaborane acetylene derivative reaction, phenylbarene, vinylbarene, barene cyclic derivatives, infrared spectrum, hydrogen bridge, C H bond, B B bond, olefin bond, electron acceptor, proton mobility, nuclear electron cloud, barene stability

ABSTRACT: This study concerns chemical reactions and the analysis of IR spectra for barene, phenylbarene, vinylbarene and 2 cyclic derivatives, according to the general formula:



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None of the IR spectra showed the presence of hydrogen bridges. Monosubstituted compounds showed valence vibration of the C-H bond of the barene nucleus at 3050-3075 cm^{-1}; no C-H bond vibration was seen in disubstituted compounds. All compounds had absorption bands at 720-730 cm^{-1}, due apparently to valence vibration of the B-B bond. There was no indication of an olefin double bond, only a strong vinyl frequency. The absence of double bonds may also be seen in the resistance of barene to halide addition and strong oxidizers. B-decachlorobarene shows B-Cl bond vibration, nitrobarene a band indicative of C-NO_2 vibration. Shift of the CO group in carboxylic acids of barene to high frequencies indicates that the barene nucleus is an electron acceptor group (its I-effect is higher than that of F, Cl and COOH). The strong electron-acceptor effect is conditioned by the high proton mobility of the C-linked hydrogen atoms. Another characteristic of the barene system is the high lability of the nucleus electron cloud; the easy conductivity of substitutions through the nucleus is shown by examples. Orig. art. has 15 formulas and 1 figure

ASSOCIATION: Institut elementoorganicheskikh soedineniy Akademii nauk SSSR

L 16439-65

ACCESSION NR: AP4043838

(Institute of Organoelemental Compounds, Academy of Sciences, SSSR)

SUBMITTED: 08Feb64 ENCL: 00

SUB CODE: GC, FP NO REF SOV: 008 OTHER: 005

Card 3/3

ZAKHARKIN, L.I.; CHAPOVSKIY, Yu.A.; STANKO, V.I.

Dissociation constants of some barene-arboxylic acids. Izv. AN SSSR Ser. khim. no.12:2208-2209 D '64 (MIRA 18:1)

1. Institut elementoorganicheskikh soyedineniy AN SSSR.

STANKO, V.I.; CHAPOVSKIY, Yu.A.; BRATTSEV, V.A.; ZAKHARKIN, L.I.

Chemistry of decaborane and its derivatives. Usp. khim. 34 no.6:1011-1039 Je '65. (MIRA 18:7)

1. Institut elementoorganicheskikh soyedineniy AN SSSR.

NESMEYANOV, A.N.; CHAPOVSKIY, Yu.A.; MAKAROVA, L.G.

Arylation of π-$C_5H_5Fe(CO)_2Na$ by onium salts. Izv. AN SSSR. Ser. khim. no.7:1310-1311 '65. (MIRA 18:7)

1. Institut elementoorganicheskikh soyedineniy AN SSSR.

ZAKHARKIN, L.I.; BRATTSEV, V.A.; CHUPOVSKIY, Yu.A.

Some transformations of alkyl halides, alcohols, and acids of the barene series. Zhur.ob.khim. 35 no.12:2160-2167 D '65. (MIRA 19:1)

L 31365-66 EWP(j)/EWT(m)/T RM
ACC NR: AP6021105 SOURCE CODE: UR/0062/66/000/002/0387/0387

62
B

AUTHOR: Polovyanyuk, I. V.; Chapovskiy, Yu. A.; Makarova, L. G.

ORG: Institute of Organoelemental Compounds, AN SSSR (Institut elementoorganicheskikh soyedineniy)

TITLE: Photochemical synthesis of pi-C sub 5 H sub 5 Fe(CØ)[P(C sub 6 H sub 5)] I

SOURCE: AN SSSR. Izvestiya. Seriya khimicheskaya, no. 2, 1966, 387

TOPIC TAGS: photochemistry, organic synthetic process, UV irradiation, molecular structure, IR spectrum, absorption band, coordination chemistry, chemical synthesis

ABSTRACT: The authors have established that $[pi\text{-}C_5H_5Fe(CO)_2]_2$ reacts with $P(C_6H_5)$ and C_6H_5I, but does not react with each of the components separately, when the reaction mixture is irradiated with ultraviolet light. In this case, $pi\text{-}C_5H_5Fe(CO)[P(C_6H_5)_3]$ is formed, whose structure has been confirmed by direct synthesis from $pi\text{-}C_5H_5Fe(CO)_2I$ and $P(C_6H_5)_3$ (UV-radiation for 4 hours, 25°, tetrahydrofuran (THF)). The identity of the compounds was established from their infrared spectra, in particular, those containing absorption bands in the region 700-800 and 1100 cm^{-1}, which can be related according to literature data to oscillations in the coordinated molecule $P(C_6H_5)_3$, and also to the absorption band in the 1950 cm^{-1} region, corresponding to the valency oscillations of the CO-group. The product yield is 87% of reacted $[C_5H_5Fe(CO)_2]_2$. [JPRS]

SUB CODE: 07 / SUBM DATE: 06Dec65 / ORIG REF: 001 / OTH REF: 001
UDC: 541.14+547.1'13+661.718.1

Card 1/1 CC

ACC NR: AP7011356 SOURCE CODE: UR/0062/66/000/010/1870/1871

AUTHOR: Nesmeyanov, A. N.; Chapovskiy, Yu. A.; Ustynyuk, Yu. A.

ORG: Institute of Hetero-Organic Compounds, Academy of Sciences USSR (Institut elementoorganicheskikh soyedineniy AN SSSR)

TITLE: Splitting of the Fe-C bond in the exchange reaction of the carbonyl ligand of $C_5H_5Fe(CO)[P(OC_6H_5)_3]C_6H_5$ for triphenylphosphite

SOURCE: AN SSSR. Izvestiya. Seriya khimicheskaya, no. 10, 1966, 1870-1871

TOPIC TAGS: exchange reaction, carbon compound, nuclear magnetic resonance, mass spectroscopy, IR spectroscopy

SUB CODE:

ABSTRACT: The authors used nuclear magnetic resonance, infrared and mass spectroscopy for studying the product of interaction between $C_5H_5Fe(CO)[P(OC_6H_5)_3]C_6H_5$ and triphenylphosphite under ultraviolet radiation. The results show a single cyclopentadienyl and two triphenylphosphite ligands per iron atom with no carbonyl ligands. This, together with the diamagnetism of the resultant compound indicate the dimer structure $(C_5H_5Fe[P(OC_6H_5)_3]_2)_2$. However, data of x-ray analysis are needed for a final conclusion. [JPRS: 40,351]

Card 1/1 UDC: 541.57+542.957+547.2+547.241

0931 1737

CHAPRAN, G.M., inzhener.

Safety guards for circular saws in longitudinal wood sawing. Der. prom. 4 no.12:27 D '55. (MLRA 9:3)

1. Trest L'vovmebel'drevprom.
(Sawmills--Safety appliances)

DZHIYANBAYEVA, R.Kh.; TALIPOV, Sh.T.; CHAPRASOVA, L.V.; SEROVA, A.P.

Complex formation of rare earths with N-methylanabasine-α-azo-β-naphthol. Nauch.trudy TashGU no.263. Khim.nauki no.13:69-71 '64. (MIRA 18:8)

TALIPOV, Sh.T.; DZHIYANBAYEVA, R.Kh.; CHAPRASOVA, L.V.; GUTNIKOVA, R.I.

Photometric determination of zinc with N-methylanabasine-α-azo-β-naphthol. Nauch.trudy TashGU no.263. Khim.nauki no.13:72-76 '64.

(MIRA 18:8)

CHAPSKAYA, O.

Give greater help to efficiency promoters. Rech. transp. 21 no.3:48 Mr '62. (MIRA 15:4)
(Cranes, derricks, etc.--Maintenance and repair)

S/191/60/000/007/015/015
B004/B056

AUTHORS: Panferov, K. V., Chapskiy, K.A.

TITLE: The Fatigue Limit of Glass Reinforced Plastics Under Mechanical Stresses

PERIODICAL: Plasticheskiye massy, 1960, No. 7, pp. 72 - 74

TEXT: This is a review of Western papers on fatigue tests of glass reinforced plastics. Three tables and one figure are taken from Western papers: Table 1 (USA), a figure (USA and Germany), Table 2 (USA), and Table 3 (USA and Germany) concerning fatigue tests for stress and bending of glass-reinforced epoxy and polyester plastics. The authors discuss the fatigue limit as a function of the kind of glass fabric used (highest stability: glass fabrics made of continuous glass fiber of the type CBAM (SVAM); lower stability: glass texture; lowest stability: glass. There are 1 figure, 3 tables, and 5 non-Soviet references.

Card 1/1

GUBENKO, A.B.; PANFEROV, K.V.; ZUBAREV, G.N.; CHAPSKIY, K.A.

Designing construction elements using plastics. Prom. stroi. 38 no.11:35-41 '60. (MIRA 13:10)

1. TSentral'nyy nauchno-issledovatel'skiy institut stroitel'nykh konstruktsiy.

(Plastics)

GUBENKO, A.B.; ZUBAREV, G.N.; PANFEROV, K.V.; CHAPSKIY, K.A.

Designing construction elements to be made with plastic materials. Prom. stroi. 38 no. 12:24-31 '60. (MIRA 13:12)

1. TSentral'nyy nauchno-issledovatel'skiy institut stroitel'nykh konstruktsiy Akademii stroitel'stva i arkhitektury SSSR.
(Plastics)

PANFEROV, K.V.; KORABEL'NIKOV, Yu.G.; CHAPSKIY, K.A.

Deformation of plastics in a tensile test as a motion component of the mobile clamp of a testing machine. Zav. lab. 27 no.6:747-750 '61. (MIRA 14:6)

1. TSentral'nyy nauchno-issledovatel'skiy institut stroitel'nykh konstruktsiy.
(Plastics--Testing)

CHAPSKIY, K.A., inzh.

Mechanical properties of glass reinforced plastics. Trudy TSNIISK no.11:264-288 '62. (MIRA 15:9)
(Glass reinforced plastics--Testing)

GUBENKO, A.B., doktor tekhn.nauk; KARMILOV, S.S., inzh.; RASS, F.V., inzh.; CHAPSKIY, K.A., inzh.

Glued three-layer slabs made with plastic. Trudy TSNIISK no.11:64-224 '62. (MIRA 15:9)

(Plastics)
(Laminated materials)

S/804/62/000/011/001/005

AUTHOR: Chapskiy, K. A., Engineer.

TITLE: Mechanical properties of fiberglass-reinforced plastics.

SOURCE: Akademiya stroitel'stva i arkhitektury SSSR. Institut stroitel'nykh konstruktsiy. Trudy. no.11. Moscow. 1962. Issledovaniya plastmass i stroitel'nykh konstruktsiy na ikh osnove. pp.264-288.

TEXT: The paper comprises a literature survey and a report on experimental work intended primarily to explore the variability and nonuniformity of the strength properties of fiberglass-reinforced plastics (FRP) and to arrive at a practicable formulation of standard specifications. The strength of a FRP depends greatly on the strength of the glass fiber and on the binder. The strength and humidity-adsorption characteristics of fiberglass are examined, also the effect of fiber diameter. The superiority of polyester-resin binders and their contribution to the strength of the FRP is substantiated. A broad literature survey of Soviet and Western literature reviews data on the dependence of the strength of various FRP on the direction of the forces applied (anisotropy), the type and combination of stresses applied simultaneously (e.g., bending and shear), the glass-fiber content of the FRP (in % of weight), the type of fiber (I – long, II – short-cropped, III –

"glacresit" made in the GDR), and the duration of stresses. The tests described were performed at the Laboratory in 1959-1960 and comprised stress-and-deformation tests of FRP of all groups, including the Soviet glass-fiber textolites KACT (KAST) and KACT-B (KAST-V), manufactured by the "Karbolit" Plant. Tension tests: In the fiber group I the FRP's CBAM (SVAM) and A Г -4c (AG-4s) the stress-strain curve of some specimens exhibits a sudden break near 1,400 kg/cm^2, a phenomenon reported for the U.S."Scotchply," also. In fiber group II the isotropy of the properties within the surface of a sheet is found to be good. In group III general agreement with earlier German data is found, but the number of specimens tested is too small to afford a statistically dependable image of the variability of properties of this type of FRP. The tests of KAST-V and KAST textolite FRP yielded tensile-strength characteristics that are reasonably close to the requirements of the respective Technical Specs. Yet, while the stress values for weft and warp are similar in a number of instances, the variances in the two mutually perpendicular directions are notably at variance with one another. Bending tests: In group I the bending strength is greater, as a rule, than the tensile strength. There is a distinct straight-line segment on the stress-strain curve, and the modulus of elasticity obtaining in that segment is greater than that observed in tension. In group II there appears to be no real straight-line portion of the stress-strain curve, and the curvature of the curve becomes greater for stresses close

to failure. Information concerning group III is shown, as are also the results of long-term flexural tests for both the second and third groups. Stress-rupture data are plotted for tests lasting over 7,000 hours in flexure, and the creep curves are shown for a number of stresses. It is concluded that standard-strength data for the various types of stressed state, which do not at present exist in the TS, e. g., in flexure and compression of KAST-V and KAST, should be represented in the future by means of transfer coefficients, i. e., ratios of the strength values for various types of stress. The investigation of the variability of the tensile strength of the FRP KAST-V and KAST had shown that the requirements of the TS lie below the mean values of the strengths on the average by 1.8-1.9 of the limiting strength. These figures should be used as a starting point for the establishment of standard stresses for other FRP for which there are no TS at present. Coefficients of uniformity for KAST and KAST-V, as obtained in industrial tests, lie in the area of 0.71-0.95. A tentative value of 0.5 has been established to allow for the unavoidable scatter of the test data. The flexural stress-rupture coefficients for KAST-V has been assumed to be 0.55, that for glass-reinforced textolite equal to 0.55. In the long-duration tests it was found that the incrementation of the flexure in non-failing specimens came to a halt approximately after 1,200 hours. The stress-rupture coefficient for the second group was tentatively assumed to be 0.3. This somewhat lower coefficient is attributed to the inadequate stiffness of the binding substance,

L 4224-63
Mechanical properties of fiberglass-reinforced . . . S/804/62/000/011/001/005

apparently due to its incomplete polymerization. With further improvement of the process technology, it may be assumed that the stress-rupture coefficient of domestic FRP might, within a reasonable time, be increased to a value equivalent to that of foreign FRP of the same type. There are 12 figures, 6 tables, and 17 references (4 Russian-language Soviet, 5 German, and 8 English-language).

ASSOCIATION: None given.

Card 4/4

GUBENKO, A.B., doktor tekhn. nauk; PANFEROV, K.V., kand. tekhn. nauk; ZUBAREV, G.N., kand. tekhn. nauk; BRUSILOVSKIY, A.I., kand. tekhn. nauk; CHAPSKIY, K.A., inzh.; KLIMOVA, G.D., red. izd-va; MIKHEYEVA, A.A., tekhn. red.

[Instructions for the design and calculation of structural elements made with plastics] Ukazaniia po proektirovaniiu i raschetu stroitel'nykh konstruktsii s primeneniem plastmass. Moskva, Gosstroiizdat, 1963. 88 p. (MIRA 16:5)

1. Moscow. TSentral'nyy nauchno-issledovatel'skiy institut stroitel'nykh konstruktsiy.
(Plastics) (Building materials)

ACCESSION NR: AT4008768 S/2804/63/000/024/0195/0217

AUTHOR: Freydin, A. S. (Candidate of technical sciences); Chapskiy, K. A. (Engineer)

TITLE: Synthetic adhesives for bonding glass reinforced plastics to glass reinforced plastics and to other materials

SOURCE: ASiA SSSR. Institut stroitel'ny*kh konstruktsiy. Trudy*, no. 24, 1963. Tekhnologiya izgotovleniya kleyeny*kh paneley iz plastmass, alyuminiya, asbestotsementa i betona. 195-217

TOPIC TAGS: adhesive, synthetic adhesive, phenolic adhesive, B, KB-3, epoxy adhesive, EPTs, bonding, glass reinforced plastic, PN-1, KAST, SVAM, glakrezit, polyester binder, phenol formaldehyde fluids, glass reinforced plastic bonding, foamed plastic bonding, aluminum alloy bonding, surface treatment, adhesive strength, bonding strength, glue, plastic glue, phenolic plastic adhesive

ABSTRACT: Extensive research on bonding native glass-reinforced plastics has been conducted in the SSSR for the aviation industry but little attention has been paid to the bonding of transparent glass-reinforced plastics for the construction industry. The selection and evaluation of suitable plastics have been undertaken

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in which bonding glass-reinforced plastics to similar plastics, to aluminum alloys, to fiberboards, and to foamed plastics was tested. The adhesive and bonding strength of the plastics was tested mechanically on construction specimens. The testing procedure is not discussed at length in the article. It was found that the PN-1-polyester-resin-based adhesive and the KB-3 phenolic adhesive qualify for bonding polyester glass-reinforced plastics. For bonding to each other the KAST-B, SVAM and glakrezit glass-reinforced plastics phenolic and the KB-3 adhesives may be used. In the case of their mechanical treatment, the former must be treated with the KB-3 adhesive before bonding. The latter may be used for bonding the former to the PS and PKhV foamed plastics. The EPTs epoxy adhesive may be used for bonding all above mentioned materials and for bonding glass-reinforced plastics to aluminum alloys. Bonding them with the KB-3 adhesive to fiberboard sheets preserves at least 40 to 50% of their initial strength when tested for artificial and natural aging. The values of ultimate stresses obtained for the construction specimens are the same in general as those obtained for small experimental samples. "M. M. Belousova, R. V. Yugova, M. A. Abdurakhmanov and P. A. Gerchikov took part in the experimental work." Orig. art. has: 14 figures and graphs, and 3 tables.

ACCESSION NR: AT4008768

ASSOCIATION: Institut stroitel'ny*kh konstruktsiy, ASiA SSSR (Institute of Building Materials, ASiA SSSR)

SUBMITTED: 00	DATE ACQ: 17Jan64	ENCL: 00
SUB CODE: MT	NO REF SOV: 005	OTHER: 000

Card 3/3

ACCESSION NR: AP4018171 S/0191/64/000/003/0063/0064

AUTHOR: Gubenko, A. B.; Freydin, A. S.; Sholokhova, A. B.; Chapskiy, K. A.

TITLE: Application of polyester maleate adhesive in preparing curved light transparent panels of fiberglass

SOURCE: Plasticheskiye massy*, no. 3, 1964, 63-64

TOPIC TAGS: fiberglass panel, production, adhesive, fiberglass cementing, polyester fiberglass, polyester maleate PN-1, phenol formaldehyde resin KV-3, fiberglass aluminum cementing, epoxy adhesive EPTs-1

ABSTRACT: Transparent fiberglass panels may be prepared by butting flat and corrugated sheets with an adhesive in a high frequency current field and cementing the panels by vacuum forming and simultaneously inserting the foam plastic frame. The polyester fiberglass may be cemented by hot or cold curing using polyester maleate resin PN-1 with cumene hydroperoxide or an adhesive based on phenol formaldehyde resin KV-3. The fiberglass and not the adhesive seam are ruptured,

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ACCESSION NR: AP4018171

the rupture occurring at a greater depth with PN-1 and the seam being lighter than with KV-3. An epoxy adhesive such as EPTs-1 may be used in cementing the fiberglass to aluminum. Orig. art. has: 3 figures.

ASSOCIATION: none

SUBMITTED: 00 DATE ACQ: 27Mar64 ENCL: 00

SUB CODE: MA NO REF SOV: 002 OTHER: 000

Card 2/2

L 39759-65 EPA(s)-2/EWT(m)/EPF(c)/EPR/EWP(j)/T Pc-4/Pr-4/Ps-4/Pt-10
ACCESSION NR: AP5005852 WW/RM S/0028/65/000/001/0015/0019

39
B

AUTHOR: Chepskiy, K. A.

TITLE: Yield strength evaluation of fiberglass sheets in bending

SOURCE: Standartizatsiya, no. 1, 1965, 15-19

TOPIC TAGS: fiberglass, yield strength/KAST V fiberglass, PN 1 bonding material

ABSTRACT: Since the yield strength in bending measurements of fiber sheets according to GOST 4648-63 gives results which are different from those in tension and compression tests, the strength of 20-mm high (two layers of fiberglass separated by foam plastic) by 210- or 300-mm long specimens in bending was compared to the strength of specimens made according to GOST 4648-63. Tests with fiberglass KAST-V (2.5-3.0 mm), polyester No. 1 (glass fiber bonded with PN-1), and Finnish polyester No. 2 (analogous to No. 1) showed that in each case the yield strength given by GOST 4648-63 tests was much higher (≈40%) than that obtained with the above specimens, while the modulus of elasticity was ≈ 100% lower. The discrepancies were blamed on the methods of calculating the stress in the GOST procedure (assuming simple beam conditions, see Fig. 1a on the Enclosure). It was found that calculating the stress by assuming the configuration in Fig. 1b (see

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L 39759-65
ACCESSION NR: AP5005852

Fig. 1b on the Enclosure) and considering that the bending failure mode depends on whether the compressive or tensile yield stress for the material is larger, the results could be brought into close agreement. The equation derived for converting the simple GOST stress σ_d to the actual stress for the deformed beam was derived as

$$\sigma = \frac{\sigma_d}{4{,}55} + \frac{H}{F},$$

(where $H = 0.195P\,l/f$; F - simple cross-sectional-area; P, f, l as per Fig. 1b). Orig. art. has: 4 figures, 1 formula, and 3 tables.

ASSOCIATION: none

SUBMITTED: 00 ENCL: 01 SUB CODE: MT

NO REF SOV: 003 OTHER: 000

Card 2/3

GUBENKO, A.B.; AL'PERIN, V.A.; CHAPSKIY, K.A.

Improve the quality of glass-reinforced polyester plastics.
Standartizatsiia 29 no.7:59 Jl '65. (MIRA 18:11)

CHAPSKIY, K.

CHAPSKIY, K.K.

Review of the system and diagnosis of the seal subfamily Phocinae. Trudy Zool.inst. no.17:160-199 '55. (MLRA 8:10)
(Seals (Animals))